

# **Software Engineering Methodology**

## **Chapter 9.0** **Installation and Acceptance Stage**

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**Chapter:**                    **9.0**  
**Installation and Acceptance Stage**

**Description:**            Installation and acceptance of the software product are initiated after the system test has been successfully completed. This stage involves the activities required to install the software, data bases, or data that comprise the software product onto the hardware platform at the site(s) of operation. The objectives of the activities in this stage are to verify that the software product meets design requirements and to obtain the system owner's acceptance and approval of the software product. The activities associated with this stage should be performed each time the software product is installed at an acceptance test site or production site.

User training may be required to complete the installation process. A description of the training necessary for programmers, testers, users, and operations staff is provided in the Training Plan.

**Input:**                    The following items provide input to this stage:

- Integration Test Materials
- System Test Materials
- Operating Documents
  - Users Manual
  - Programmers Reference Manual
- Training Plan
- Installation Plan
- Conversion Plan
- Acceptance Test Plan
- Preacceptance Checklist
- Security Checklist
- Project Plan (*revised*)
- Software Quality Assurance Plan

**High-Level**  
**Activities:**

The remainder of this chapter is divided into sections that describe the specific high-level activities performed during this stage. These activities represent the minimum requirements for a large software engineering effort. *Notes* are provided, as applicable, to assist in customizing these lifecycle stage requirements to accommodate the different sizes of software engineering efforts. The high-level activities are presented in the sections listed below.

- 9.1    Perform Installation Activities
- 9.2    Conduct Installation Tests
- 9.3    Conduct User Training
- 9.4    Conduct Acceptance Test

**High-Level  
Activities,  
continued:**

- 9.5 Conclude Acceptance Process
- 9.6 Transition to Operational Status
- 9.7 Revise Project Plan
- 9.8 Conduct In-Stage Assessment
- 9.9 Conduct Installation and Acceptance Stage Exit

**Output:**

Several work products are produced during this stage. The work products listed below are the minimum requirements for a large software project. Deviations in the content and delivery of these work products are determined by the size and complexity of the project. Explanations of the work products are provided under the applicable activities described in the remainder of this chapter.

- Converted data or system files
- Installation Test materials
- User Training materials
- Acceptance Test Report
- Acceptance Checklist
- Operational software product
- Operating documents
- Project Plan (*revised*)

A matrix showing the work products associated with each high-level activity is provided in *Exhibit 9.0-1, Installation and Acceptance Stage Activities and Work Products*. The matrix also shows which work products are deliverables and whether they are required or optional for small, medium, and large projects.

**Review Process:**

Structured walkthroughs are necessary during this stage to validate work products. The activities that are appropriate for structured walkthroughs are identified throughout the chapter. The time and resources needed to conduct the walkthroughs should be indicated in the project resources, schedule, and work breakdown structure.

**Reference:**

*Appendix C, Conducting Structured Walkthroughs*, provides a procedure and sample forms that can be used for structured walkthroughs.

**Exhibit 9.0-1. Installation and Acceptance Stage Activities and Work Products by Project Size**

Work Activity		Size L M S			Work Product	Scheduled Deliverables L M S		
9.1	Perform Installation Activities	R	R	R	Converted data or system files	I	I	I
9.2	Conduct Installation Tests	R	R	R	Installation Test materials	R	R	R
9.3	Conduct User Training	R	R	R	User training materials	R	R	R
9.4	Conduct Acceptance Test	R	R	R	Acceptance Test materials Acceptance Test Report	R R	R R	R R
9.5	Conclude Acceptance Process	R	R	A	Acceptance Checklist	R	R	A
9.6	Transition to Operational Status	R	R	R	Operational software product Operating documents	R R	R R	R R
9.7	Revise Project Plan	R	R	R	Project Plan (revised)	R	R	A
9.8	Conduct In-Stage Assessment	R	R	A	ISA Report <sup>1</sup>	N	N	N
9.9	Conduct Installation and Acceptance Stage Exit	R	R	A	Stage Exit Meeting Summary	N	N	N

Size: L = Large  
M = Medium  
S = Small

Minimum Requirements: R = Required  
A = As Appropriate  
N = Not Appropriate

I = Input to other deliverables  
<sup>1</sup> = Completed by reviewer

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The following materials were used in the preparation of the Installation and Acceptance Stage chapter.

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